## Notes and Descriptions of Pselaphidæ, with Remarks on the Scydmænidæ.

BY E. BRENDEL, M.D.

Mons. Achille Raffray took for a diagnostical base of the genera of the tribe Tyrini the length of the last joint of the maxillary palpi, which necessitated the establishment of quite a number of genera consisting, until now, of a single species. Pytna Casey and Tyrus do not differ by any other property. Hamotus and Cercocerus, aside from the different form of the antennæ, are differentiated by the length of that last palpal joint which separates Upoluna from Cercocerus, and takes Hamotus elongatus (Tyrus elongatus Brendel) from Hamotus, making a Cercocerus. I hope future discoveries will bring on a justification one way or the other.

Tychus Iudovicianus n. sp.—Form and color of *T. longipalpus* Lec. and somewhat larger; pubescence not long, sparse. Length 1.9 mm. Head and prothorax like *T. longipalpus*. Elytra more convex; antennal joints rounded, visibly longer than wide, fifth perceptibly larger, eighth as long as wide, ninth and tenth transverse; the 5 anterior trochanters, near the coxal articulation, are armed with a small conspicuous thorn; metasternum tumorous in the middle before the posterior coxæ, the tumor is divided posteriorly by a wide prismatic groove, the two parts crowned by a large mastoid sharp thorn; first ventral with a deep digital impression, the last with a deep circular fovea near the apex. the posterior coxæ mutually as distant as the width of the capital front; the third palpi joint as long as the last, the inner edge not angulate as the *T. longipalpus* from Ohio, Illinois and Missouri, which latter has the metasternal tumor not armed, and the antennal joints not rounded, but oblong-conical.

Louisiana, Mississippi near the Gulf shore (Hugo Soltau).

Tychus micropthalmus n. sp.—Unicolorous brown, coarsely, not densely pubescent, impunctate. Length 1.4 mm. 5.—Form like T. puperulus. Head on the eyeline as wide as long, vertex but slightly convex, transversely, longitudinally straight and the supraantennal tubercles but little elevated; eyes very far below the vertex, consisting of about eight facettes; antennæ longer than the head and prothorax; palpi of the form of those of T. cognatus; the base of the pronotum with five or seven very small punctures; anterior trochanters with a very strong, curved spine.

Cañon City, Col. (Wickham) The female is not known, and is perhaps without any eyes.

Pselaptrichus belongs to the Bythinus group, and should be placed between Tychus and Machærites. A change of the name Machærites (from μαχαιρα a knife) into Machærodes is unnecessary, as the tubercles of the second palpal joint are absent in some European species, and present in our M. tychoides.

The names Anops and Typhloops being preoccupied, and Eusanops, proposed by Capt. Casey, means only "nearly blind," I forged, by hard labor, the euphonic name Arianops (Pl. IV, fig. 3), from  $\dot{a}\rho t$  "very,"  $\dot{a}\nu$  "without,"  $\dot{a}\sigma s$  "eve."

**Decarthron mariuum** n. sp.—Form like *D. Brendeli*, impunctate, pubescence white, moderately long, thinly distributed. Length 1.7 mm.

The males differ from *D. Brendeli* (Pl. IV, fig. 6) by having the antennæ not modified and the distal third of the intermediate femora simply compressed, forming a sharp ridge above, but no tubercle or spine as in *D. exactum*. From *D. abnorme* it differs in the whole form.

Golfview, Miss.; New Orleans, La. (Hugo Soltau).

**Decarthron scarificatum** n. sp.—Has the form of *D. stigmosum*. Length 1.7 mm. Head with two large fovere on the eye-line, twice as far apart as either from the eye; two small punctures between the frontal tubercles, connected with the occipital fovere by a straight, faintly impressed line; prothorax sculptured with parallel longitudinal scars of equal length, each scar about four times longer than wide, fusiform, the base garnitured with a row of sharp punctures; elytral lines entire, abdominal basal carina, including half the width, appear as a continuation of the discal lines of the elytra.

Iowa, Cedar Rapids.

**Decarthron seriepunctatum** n. sp. Length 1.2 mm. §. Form, size and color of *D. formiceti*, but the head has the occipital foveæ very large, the frontal depression quite obsolete, the prothorax is less circular, widest rather behind the middle, the base wider and neck narrower; the elytra are visibly punctate in longitudinal rows, which are plainer on and near the sutural lines and on the lateral declivities; the pubescence is rather long and abundant; antennal joints decreasing in size from the base to the middle and thence increasing; the intermediate femur is not inflated as in *D. formiceti*, and as it is gauged from the middle, it does not present that enormous spine of *D. formiceti*, but simply two tubercles.

Tennessee, H. Ulke.

Bryaxis foveata Lec.—Red-brown, elytra and legs brighter, impunctate, pubescence very fine. Length 1.45 mm. Head large, frontal ridge angular, interantennal space depressed, fovea circular; pubescent and equal in size to the occipital foveæ; antennæ slender, joint 1 cylindrical, twice as long as wide, 2 as wide as 1, and one-half longer than wide, the following ones much narrower, 3 and 5 twice as long as wide; 4 and 6 shorter, 7 still shorter; 8 as long as wide, 9 and 10 trapezoidal, increasing in width and length; prothorax wider than long, all foveæ very large, pubescent, and fully seen from above; elytra confusedly faintly punctulate; abdomen 5 with the first dorsal one-third as long as wide, the carinæ including one-half of the surface within the border, the middle of the posterior end raised from the base of the second, so as to form a triangular opening; the second segment not produced as in B. Belfragei, but similarly transversely depressed at its base; the third is not modified; the posterior tibiæ are not dilated.

Salt Lake, Utah.

Bryaxis Belfragei Lec. has the second dorsal segment of the male excavated or depressed; the depression, deepest at the base, takes in half the width of the segment, arcuate, indefinitely limited and shallow, and in the middle of the depression there is a carina rising from a small bilobed basal elevation.

Bryaxis cylindratus n. sp. & .—Piceous black, impunctate, thinly pubescent, elytra dark red; antennæ, palpi and legs brown. Length 1.4 mm. Head with three equidistant, equal, large, spongipubescent foveæ, not more distant mutually than their diameter; prothorax wider than the head, convex, lateral foveæ not larger than those on the vertex, circular not fully seen from above, median fovea very small; the base twice as broad as the neck; elytra rather convex, thinly and minutely punctulate, shoulder width not exceeding the width of the prothorax, tip twice as wide as the base of the prothorax; discal lines very long, convergent; first abdominal dorsal segment two-fifths as long as its width, with long divergent, at the base closely approximate carinæ; antennæ (Pl. IV, fig. 18) nearly as long as the head, prothorax and elytra together, all the joints cylindrical, none less than twice longer than wide, the fifth three times longer, the last as wide as the first, three times longer, and as long as the three penultimate together; the middle tibiæ spurred before the tip, and the coxæ armed with a curved thorn.

North Illinois. The Q I have associated with this species.

Bryaxis facilis Casey, according to the author's testimony by kindly naming a specimen for me, is nearly related to B. divergens, from which it differs by being narrower across the shoulders and the elytra impunctate.

Bryaxis depressifrons n. sp.--Piceous black, impunctate, pubescence short, sparse, elytra red, with a dark brown basal fascia at the humeral calluses; legs, antennæ and palpi red. Length 1.3 mm. Head (Pl. IV, fig. 17) from the mouth to the base longer than wide, prognathous, from the base to the frontal declivity one-half as long as the head is wide, eyes included; the front trilobed or deeply bisinuate; the lobes elevated, leaving two furrows, each of them connecting the large occipital foveæ, which are nearer to the declivity than to the base, the larger medial elevation connects the occiput with the frontal declivity, the lateral elevation punctured, the declivity perpendicular, bearing at its bottom a transverse oval pubescent spot like B. compar; clypeus and labrum simple and nearly horizontal; antennæ with the first and second joint as thick as the last joint, eighth, ninth and tenth trapezoidal, very transverse, the intermediate globular or obconical in the third and fourth, about half as wide as the second; elytral discal lines convergent, the abdominal basal carinæ short, including one-third of the segmental width.

California, Alameda County (Chas. Fuchs). Three females, which ought not to be described, but their peculiarities which might lead to the discovery of the males.

Bryaxis compar Lec. is identical with B. franciscana Casey (teste Casey).

Bryaxis Wickhami n. sp.—Unicolorous, ferruginous, impunctate. Length 1.4 mm. Head, frontal margin triangularly produced, bearing the circular pubescent fovea, which is equal with and less distant from the occipital foveæ as the latter are mutually; antennæ δ (Pl. IV, fig. 19) longer than the head and prothorax, joints 1 and 2 equal, obconical, large, third and fourth very small, globular, as large as the seventh or eighth; the fifth largest, longer than wide, as thick as the last joint, with a perforate large fovea underneath, truncate at the tip, the sixth in form and size equal to the second; ninth and tenth obconical, longer than wide, not quite as strong as the sixth; the last as long as the ninth and tenth togther ovate acuminate; prothorax very convex, the foveæ not fully to be seen from above; elytra with a subhumeral fovea on the declive side, slightly elongated backwards; abdominal carinæ including one-third of the segmental width.

Q.—Antennæ not longer than the head and prothorax, the fifth and sixth are not as large, and the third, fourth, seventh and eighth not as small as in the  $\delta$ ; the fovea of the fifth joint, however, is present, though a very small puncture.

From Canon City, Col., discovered by H. F. Wickham.

Batrisus sinuatifrons n. sp.--Brown, elytra and legs red, tarsi and palpi yellow. Length 1.8 mm. Head orthognathous, vertex as long as wide, quadrate, sides parallel, edge extremely finely earinate, front broadly arcuate: disc scabrous, with two small nude punctures in the eye-line, mutually four times as distant as either from the eye; no circumambient sulcus; front (Pl. IV, fig. 5) declive anterior to the antennal line, the short declive part bisinuate, leaving in the middle a black, shining, sharp-pointed tubercle, and at each side a pendant, cylindrical, squarely truncated peg, crowned with short yellow hair; the clypeus rises from the labial base as a straight column crowned by two divergent tufts of hair, the lateral wings are edged and gradually more reflexed towards the upper lateral angle, which is turned straight forward, appearing from a side-view as a sharp horizontal spine; antennæ, joint 1 eylindrical, curved, three times longer than wide; 2 not much narrower oval, 3-8 equal in width, gradually shorter, 5 little stronger, 8 transverse, 9 transverse, wider, 10 twice as wide as 8, globose, the underside with the basal half sharply excavate, 11 not thicker ovate-acuminate; prothorax trisuleate, trifoveate, basal thorns large, sharp, continued anteriorly and posteriorly by short carinæ, in the middle between the base and the medial fovea is a distingued carinæ; disc impunctate: elytra broad shouldered, the lateral callus not armed, on the declive sides a conspicuously impressed line rising from a subhumeral fovea; last palpal joint meniscus-shaped.

Q.—Clypeus faintly trilobed, continuous with the front, tenth antennal joint small.

Memphis, Tenn. (Hugo Soltau).

Batrisus elypeonotus n. sp.--Dark umber-brown elytra; legs, palpi and elub of the antennæ red. Length 2.2 mm. 5. Head prognathous, vertex quadrate, not arched in front, sides parallel edged, fovea small, nude, widely distant, grooves not deep, not connected in front, disc punctate, roof-shaped and earinate in the middle, margin densely punctate; frontal margin (Pl. IV, fig. 4) on the declivity broadly arcuately bilobed; in the middle of the interantennal excavation are to be seen two black teeth, rather far apart; elypeus slightly

carinate in the middle of the rather broad tubercle, crowned with the usual two pencils of yellow hair, lateral upper angle of the wings largely reflexed, forming a three-edged pyramid, curved forward, one edge is formed by the lateral edge, the other by the upper edge of the clypeus, the third runs at the outside backwards to the base of the antennæ; labrum emarginate, granulate; antennæ; joint 1 twice as long as wide, flattened above, the flat surface divided longitudinally in an upper part smooth, shining, and a lower part granulated; 2-3 cylindrical, slightly narrower at their bases, 8 transverse, 9 oval or thickly lenticular, 10 globose, not foveate, 11 not as thick as the tenth, ovate acuminate, not longer than the ninth and tenth together; prothorax trisulcate, bicarinate from the middle to the tubercle, which is large acuminate and carinate anteriorly and posteriorly, the middle of the base carinate: clytra punctate, base trifoveate, humeral callus acute; first dorsal segment one-third as long as its width, basal impressions deep, carinulæ one-fifth apart; posterior tibiæ with a thick spur near the tip inside.

Ponchatoula, La.; a single specimen (Hugo Soltau).

**Trimioplectus? parabolicus** n. sp. (Pl. IV, fig. 7)—Brownish yellow pubescence fine, dense, not as convex as *T. obsoletus*. Head wider than long, antennal tubercles prominent channeled, sulcus broadly parabolic connecting the pubescent foveæ, base angularly impressed, but neither sulcate nor carinate, neck rather thick; palpi small, hardly longer than the second antennal joint; antennæ; joint 1 rather short, 2 obovoidal large, 3–7 small globular, 8 slightly transverse, 9 as long as 8, and three times wider, 10 longer, and three times wider, 11 wider ovate; prothorax wider than long, lateral foveæ seen from above, connecting sulcus, angulated in the middle, base minutely punctured; elytra nearly quadrate, the sutural basal punctures not farther apart than the lines; discal foveæ deep, with a short elongation as long as one-fifth of the elytral length; dorsal segments all nearly equal in length, base not carinate; ventrals, the second but little longer than the third; legs: the anterior thighs stronger, middle trochanter armed with a conical thorn.

This is a doubtful member of the genus *Trimioplectus*, and does not compare more favorably with any other genus.

Euplectus elongatus n. sp.—Form and sculpture resembling Euplectus confluens, but more robust. Length 1.4 mm. Head of the male shorter, more transverse, no frontal transverse sulcus as in E. confluens, otherwise like it in sculpture; prothorax nearly as wide as the head, much wider than in confluens, impunctate, widest in the anterior third, where it is more angularly rounded than E. confluens, and therefore appearing more transverse; elytra impunctate, sutural lines arenate, discal lines reaching to half the length of the elytron; abdomen narrower than the elytra, side parallel, impunctate; ventral  $\delta$  sexual marks differ from E. confluens, having the fifth ventral not modified, the sixth or penultimate deeply foveate in the middle, the last lozen-shaped and carinate

From Chestnut Ridge, Pa. (Jerome Schmitt).

I consider this species, with *E. confluens* and *californicus*, as climatical races of Pennsylvania, Illinois and California.

Rhexius Schmitti n. sp.—Ferruginous yellow, impunctate, pubescence fine, more recumbent. Length 1.3 mm. Head more convex, the occiput carinate

in the middle, not sharply edged at the posterior declivity, the frontal margin transversely depressed and broadly angulate in front; prothorax (Pl. IV, fig. 20) with the sides slightly sinuate and mutually convergent in an angle of 72° anteriorly, in the middle arcuate and nearly straight thence to the base, which latter is as wide as the length of the prothorax; the fovea and grooves as in R. insculptus; elytra with a basal elevated margin. 4 puncture and indications of four lines, the third the longest.

Discovered by P. Jerome Schmitt in Pennsylvania (Henry Ulke, ibidem).

Our species of Favonus, from the Pacific coast, Sharp and Raffray declare identical with Sagola Sharp; and Sonoma cavifrons Casey identical with Sagola parviceps Mäklin. They seem to be widely distributed from Alaska (from whence I have the largest specimen, which is as long as F. tolulæ Lec.) to San Francisco. Our Faronus tolulæ, considered by LeConte a doubtful Faronus, seems to be neither Sagola nor Faronus, and will be investigated by M. A. Raffray.

Euplectus rufipes Lec. (Pl. IV, fig. 9) is said to be a convex form. The figure of a specimen from Iowa agrees with Casey's description, but is a true Euplectus, not resembling a Trimium. Which is the true form?

"Aenisis (Desimia) dispar Sharp, described in the Biologia Centrali-Americana, was discovered by my friend, Mr. A. Bolter, in Arizona."

## Remarks on the Scydmænidæ.

Scydmænus gracilis Lec. is not a Scydmænus, neither is it a Chevrolatia. There is nothing known to me with which it can be united.

Eumierus Caseyi n. sp.--Form similar to Cholerus Zimmermanni, slender, yellowish brown, polished, impunctate, pubescence abundant, not dense. Length of § 1.1 mm., of ♀ 1.4 mm. Head trapezeous, widest across the frontal quarter, where the outlines are shortly arcuate, nearly straight and convergent to the neck, the sides rounded, not edged, disc broadly convex, without any impression. Eyes on the sides of the front, in &, as large as the second antennal joint, very flat, of a brown color (nyctalopic), not seen from above; in Q less than one-third as large as in \( \frac{5}{5} \) and hardly perceptible. Antennæ at the base nearly contiguous. separated by a very narrow septum; 1st joint cylindrical, four times as long as wide; 2d oval, as wide as 1st; 3-8 globular, equal; 9th nearly twice as wide and little longer than the Sth; 10th larger than 9th, and of the same form; 11th as long as 9th and 10th together, ovate on third longer than wide. Prothorax as long as wide, seemingly longer, widest one-third from the neck; neck one-half as wide as the base, lateral outlines arcuate anteriorly, slightly sinuate posteriorly, hind angles rectangular; disc very convex, sides rounded, near the middle of the base on each side a sharp puncture and a transverse, very faintly impressed line (in \in \text{more perceptible}), connecting the puncture with a very shallow lateral impression. Elytra widest in the middle, and one and two-thirds longer than wide, shoulders high, prominent, their width as wide as the prothorax, tip rounded, very broadly arcuate, nearly truncate. Pygidium triangular: mesothorax carinate; first ventral twice as long as the second, the last longer and convex in the Q, short and concave in  $\delta$ .

Pennsylvania.

As a slight return of favors received this is named in honor of Capt. T. L. Casey.

Scydmænus? ovithorax n. sp. (Pl. IV, fig. 12),—Brown, impunctate, thinly pubescent. Length 0.8 mm. Head three-fourths width of prothorax, nearly quadrate, the frontal margin tripartite by short impressed lines, declive anteriorly. Eyes brewn (nyetalopical) very flat and small on the anterior part of the sides and hardly to be discerned; antennal club 3-jointed. Prothorax obovate, without any impressions and rounded sides. Elytra together elliptical, shoulders obsolete, faintly depressed at the middle of the base of each elytron; sutural lines faintly indicated at the basal fourth, the posterior part seems to be connate (wingless?); anterior coxæ contiguous, posterior coxæ small, mutually remote, femnrs clavate, pedunculate, compressed; ventral segment six, the last very large, as long as the three preceding ones together.

California, Santa Clara County. Ch. Fuchs.

Like Scyd. minimus (Pl. IV, fig. 13), this is a very doubtful Scydmanus, but I prefer to leave it there until similar forms are discovered.

Brachycepsis, of which I described B. Fuchsii (Pl. IV, fig. 11) includes all Scydmæni with "collum imersum thorace" of LeConte's Synopsis and (teste Dr. Sharp) ought be retained in that new genus.

## EUTHIA Stephens.

Until the present day the genus Euthia was never discovered in the United States of America. Our present species of the genus Euthiodes, supposed to be Euthia, differ in the form of the maxillary palpus, the third and fourth joint being united to a thick fusiform body sharply pointed, the antennæ strongly geniculate, the posterior coxæ mutually very moderately distant. Common with Euthia is the general form with the head short, pronotum arcuate, quadrate, edged on the sides, elytra finely margined, truncate or not covering the pygidium. The species known, according to LeConte's Synopsis, are:

Prothorax wider than long, with an abbreviated basal line. Length 1.1 mm.
(Alaska, Oregon).....seitula Mäklin.

Prothorax as long as wide, basal line entire, connecting three punctures (California).....impressa.

Prothorax longer than wide, basal line connecting five punctures (California).

остовек, 1893.

There are two specimens before me said to be *E. scitula* from Pennsylvania and *colon* from Iowa, which do not agree with the above descriptions. *Enthiodes lata* n. sp. (Pl. IV, fig. 15) the supposed *colon*, is coarsely, faintly and sparsely punctured at the sides of the elytra, otherwise impunctate; the vertex without impressions; the pronotum with median basal punctures, a longitudinally elongate fovea next to the posterior angle and between it and the medial one two confluent punctures; elytra one and one-half times longer than wide.

The supposed *E. scitula* (*Euthiodes cristata* n. sp.) (Pl. IV, fig. 16) is extremely fine and sparsely punctulate and 0.66 mm. long; the bead is carinate in the middle, on either side of the carina impressed; the pronotum has an abbreviated basal line, a transverse, conspicuous fovea one-fifth of the length of the disc from the base, on either side in the middle between the medial and the anteriorly prolonged lateral fovea is a deep puncture; the basal corners are explanate. Length 1.2 mm. Pennsylvania (Jerome Schmitt, H. Ulke).

## EXPLANATION OF PLATE IV.

Fig. 1.—Enpsenius glaber, long. 1 mm.

- " 1a.--Venter of same.
- " 2.--Antennæ 5 and ♀ Atinus monilicornis.
- " 3.—Arianops amblyoponicus, long. 3,4 mm.
- " 4.--Face of Batrisus clypeonotus.
  - 5 .- Face of Batrisns sinuatifrons.
- " 6 .-- Antennæ & and & Decarthron Brendelii.
  - 7.—Trimioplectus parabolicus.
- " 8.—Trimioplectus obsoletus, long. 1.2 mm.
- " 9.—Euplectus rufipes, long, 0.6 mm.
- " 10 .-- Rhecidius trogasteroides, long, 2 mm.
- " 11.—Brachycepsis Fuchsii, long, 1 mm.
- " 12.--Scudmæus (?) ovithorax, long, 0.8 mm.
- " 13.-Scydmæus (?) minimus, long. 0-5 mm.
- " 14 .- Cephennium anophthalmicum, long. 1 mm.
- " 15.-Enthiodes lata, long. 0.66 mm.
- " 16 .-- Euthiodes cristata, long. 1.1 mm.
- · 17.--Head of Bryaxis depressifrons.
- " 18 .- Antenna of Bryaxis cylindrartus,
- " 19 .-- Antenna of Bryaxis Wickhami.
- " 20 .-- Prothorax of Rhexius Schmitti.